# **FOREWORD**

New style wiring harness is designed upon *chery sedan wiring harness-updating plan* approved by Chery Auto Co., LTD in July 2001. According to updated plan, concentrated control in central electrical box is replaced with a nearby control method in design, enhancing circuit performance, avoiding internal resistance and heat sources interference between electrical devices and increasing the whole vehicle wiring harness reliability and endurance.

During updating, some structures and features on home and abroad famous brand name vehicles are used for reference or equivalently taken as follows:

- 1. Adding whole vehicle electrical devices problem automatic safety-protect unit, which ensure whole circuit system being cut off when sudden accident occurs to avoid possible fire hazard or other injury from short problem.
- 2. Selecting a new central electrical box mainly used for whole vehicle control circuit, in which there are 6 built-in mini relays, 24 type fuses, 3 intensive safety protect units and 58 external connecting points.
- 3. High current and power electrical devices are nearby controlled, such as fan and A/C control circuit are directly completed at front compartment harness, shortening the current path.

Comparing with old wiring harness, main changes in wiring harness and electrical devices are as follows:

Interior harness, front compartment harness, I/P (instrument panel) harness, battery positive harness, central electrical box, two front and rear fog light switches instead of one switch on old vehicle, and also relevant changes in ABS harness connector.

But control theory and whole vehicle harness routing mainly keep unchanged.

Only whole vehicle electrical devices theory illustrations are available in this manual and there exists difference with actual electrical devices circuit. For convenience of compiling and printing, some big circuits page are divided into several small pages, which will take inconveniences when reading and therefore will require the user have a good command of circuits on SQR710 sedan.

For compilers' knowledge and time limits as well as rapid technology updating, some errors and oversights are hard to avoid and kindly appreciate for users' pointing out with the idea of improving together. Electrical system are rapidly updated, therefore some new circuit are not compiled on this manual on the time of publishing and will be supplemented timely.

This manual is compiled by Chang Yongjiu, Yao Shen and reference books are supplied by product department.

Written by compilers

November 2002

# TOTAL CONTENT

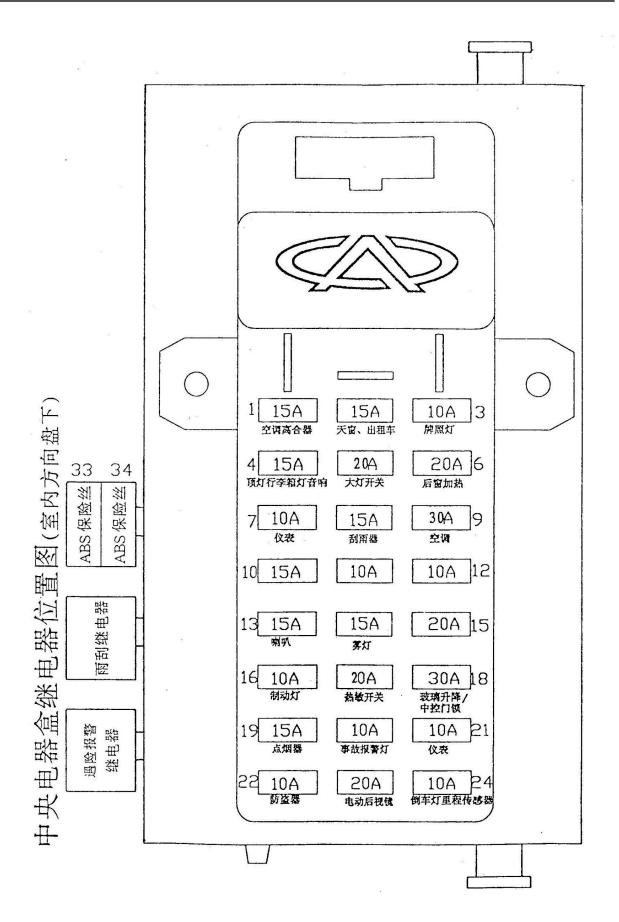
No.1 Central Electrical Box Fuse And Relay Position (2 Pages)

No.2 Central Electrical Box Connector Position And Function (3 Pages)

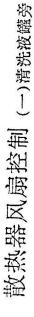
No.3 Circuit Manual Explanation (2 Pages)

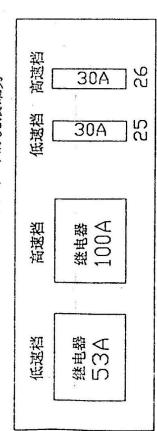
No.4 Circuit (23 Pages)

No.5 ET Vehicle Circuit (25 Pages)

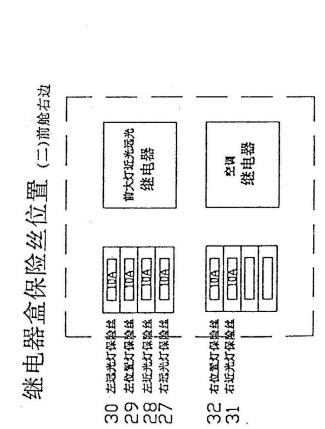


# 继电器、保险丝位置图

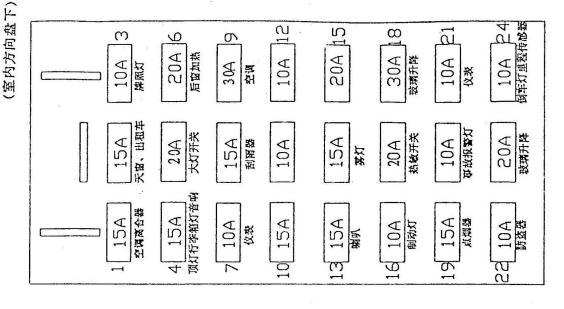




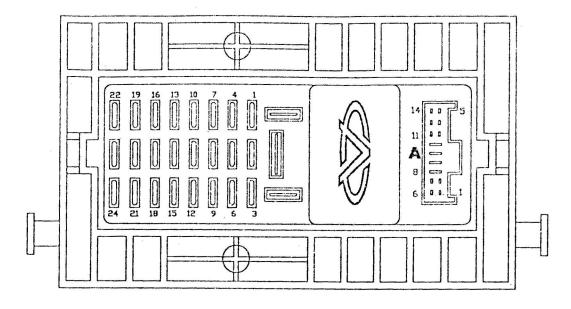
注:双风扇时高速用 50A 保险丝

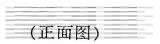


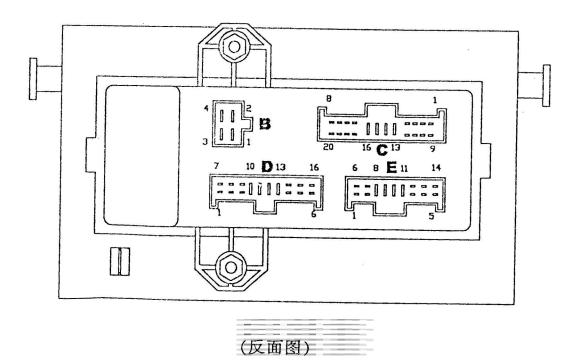
# 中央电器盒保险丝位置



# Central Electrical Box Connector Position







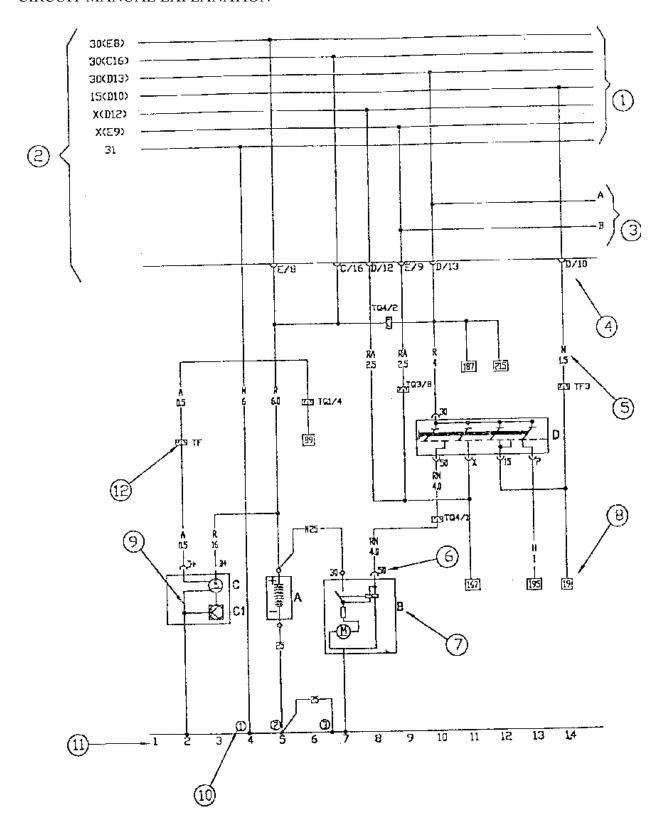
Central Electrical Box Connector, Pin and Function

Connector	Connector Pin Function	Circuit No.
A	01.Sunroof, Cab Freight Calculator (+15) 02.ECUA/C Signal Input 03.— 04.Luggage Compartment Lamp, Radio, Ceiling Lamp 05.— 06.— 07.— 08.— 09.Rear Window Preheat Switch, Rear Mirror Defrost Switch 10.— 11.Lamp Switch Illumination, ABS Diagnostic Power (+15) 12.— 13.Combination Instrument Power Positive (+30) 14. Brake Switch	
В	01.—— 02.—— 03.—— 04.A/C Relay, Blower, Interior Circulate Solenoid Switch	
С	01.Horn Switch 02.Fog Lamp Relay (Positive) 03.Fog Lamp Switch 04.Horn Relay Signal (30) 05.Dual Pitch Horn 06.Wiper Motor (Positive) 07.Panel Indicator, Switch Illumination Light, Light Switch Variable Resistor 08.Back Light Switch 09.—— 10.—— 11.—— 12.Fog Lamp Relay (Positive) 13.—— 14.—— 15.Thermo Switch, A/C High Pressure Switch 16.Central Electrical Box Power Positive (+30)	142 219 220 140 141 154 209 83 152 — 215 — 47 6

CIRCUIT\_Central Electrical Box Connector, Pin and Function

Connector	Connector Pin Function	Circuit No.
С	17.—— 18. Wiper Intermittent Relay 19. Lincense Plate Lamp 20. Mileage Gauge Sensor	— 149 210 81
D	01. — 02. Cigar Lighter 03. Turn Light Switch, Headlight Adjustment Switch 04. — 05. Combination Instrument Positive (+15) 06. Sunroof, Cab Freight Calculator (+30) 07. Ground 08. — 09. Rear View Mirror, Lifter Module, Position Select Box (+15) 10. Ignition Switch (+15) 11. Central Locking Controller, Glass Lifter Module (+30) 12. Ignition Switch, Wiper Switch (+15) 13. Central Electrical Box Power Positive (+30) 14. — 15. — 16. —	
E	01. —— 02. —— 03. —— 04. A/C Compressor Magnetic Clutch 05. —— 06. —— 07. —— 08. Central Electrical Power Positive (+30) 09. Ignition Switch (+15) 10. Lamp Switch 11. —— 12. Horn Relay 13. —— 14. ——	

# CIRCUIT MANUAL EXPLANATION



# **Compiling Explanation**

- 1. Central Electrical Box Main Circuit Board Circuit No.
  - 30: No Fuse, Positive Goes Directly From Battery
  - 15: No Fuse, Positive Goes To Ignition----Start Switch
  - X: No Fuse, Positive Goes To Ignition ---- Start Switch, And Being Cut Off During Starting
    - 31: Fictitious Ground, This wire actually exists or does not actually exist.

Example: 30(E8) defines these 30 hot wires are directly from battery, and come from central electrical box socket E pin No. 8.

30(C16), 15(D10), X(D12)... are similar as 30 (E8)

2. Central Electrical Box Main Circuit Board Block

This block on main circuit board includes fuse, relay and connection interface.

- 3. Wire routes as follows:
  - ——coming from right side on previous page
    - —going to left side on next page
- 4. Central Electrical Box Main Circuit Board Pins No.

It will be helpful for locating main circuit board circuit, such as E/8 indicates the 8<sup>th</sup> pin on central electrical box socket E.

- 5. Wire colors and cross-area, square millimeter
- 6. Connection Symbol

This symbol is signed on component.

- 7. Parts or components name (illustrated on left bottom of each page).
- 8. symbol for wire continuing

Number in square form indicates wire number or appropriate extending wire no.

9. Internal wire

Used for locating internal wire. This wire may actually exist or does not exist.

10. Ground point

Indicated by number in circle, and the point is also indicated on circuit.

11. Circuit number

Used to locating component and interrupted wire connecting point.

12. Multi-hole connector connecting points

Socket terminal numbers are given.

# CONTENT -2-

——Battery, Alternator, Starter Motor, Ignition Switch	01
——SPI EI System (MARELLI)	02
——MPI EI(Electronic Injection) (MARELLI)	02
——A/C Unit, Control Head, Cooling System	03
——A/C Switch, Interior Circulate Solenoid, High & Low Pressure Switch	04
——Oil Pressure Switch, Coolant Temperature Sensor, Manual Brake Indicator Switch,	Mileage Gauge

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Cl	ΙK	U	ш	ı

Sensor	05
—Radio and 6 Speakers	06
—IP (Instrument Panel) and MFA	07
—Front Fog Light, Cigar Lighter, A/C Panel Indicator	08
 —Rear Window Heating System, Dual Pitch Horn, Compressor Magnetic Clutch	09
-Wiper, Horn Button, Washer	10
 —Headlight, Front Position Light, Light Relay	11
—Turn Light, Parking Light Switch, Emergency Warning Relay	12
—Taillight, Side Light, Brake Light	13
 —Light Switch	14
—Back Light, Rear Fog Light	15
—Headlight Adjuster	16
——Front & Rear Interior Light, Luggage Compartment Illumination Light, Sun Visor Light,	License
Plate Light, Door Touch Switch	17
—Central Locking	18
 —Power Mirror	19
–ABS	20
 —Power Glass Lifter Control Unit	21
 —Power Glass Lifter Control Switch	22

SPI Electronic Injection (Marelli)

(Marelli)
B=White
N=Black
R=Red
M=Brow
n
V=Gree
n
A=Blue
H=Grey
Z=Purpl
е
G=Yello
W
J=Orang
e F=對紙

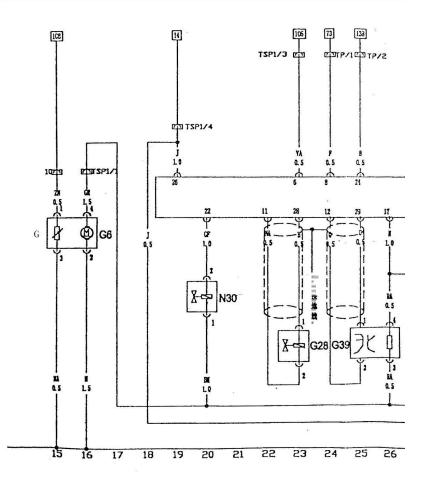
30(E8)
30(C16)
30(D13)
15(D10)
X(D12)
X(E9)
31

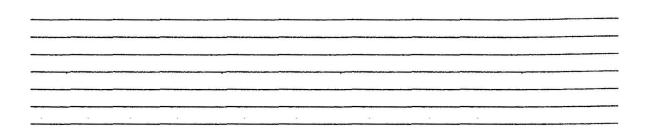
J200 SPI controller unit G42 Air Intake Temperature Sensor G62 Water Temperature Sensor G69 Throttle Position Sensor G19 Air Intake Pressure Sensor N30 Active Carbon Canister Solenoid G28 Crankshaft Position Sensor G39 Oxygen Sensor G35 System Fuse S36 Oil Pump Fuse A+ Battery Positive J176 ECU Relay J17 Power Relay N1 Cylinder 1-4 Ignition Coil N2 Cylinder 2---3 Ignition Coil Q Spark Plug N80 Fuel Injector

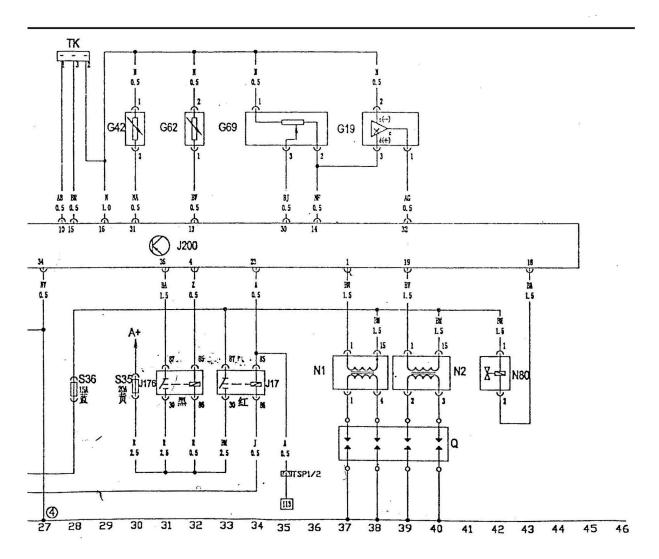
G Fluid Level Sensor

TK Diagnostic Socket (4) Ground On Engine

G6 Fuel Pump

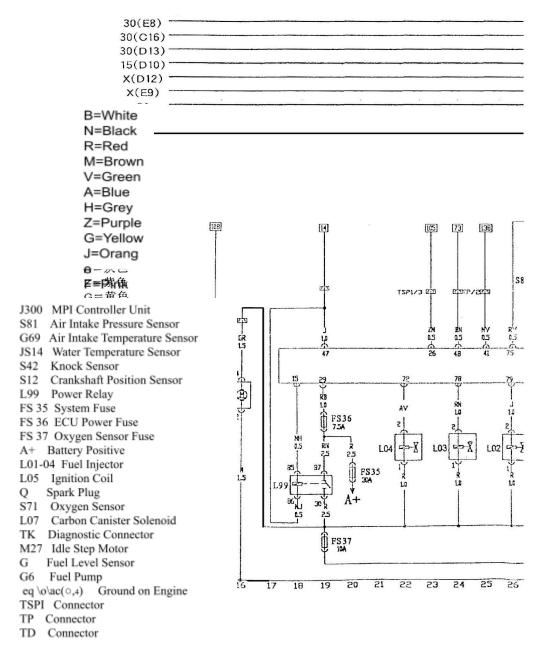




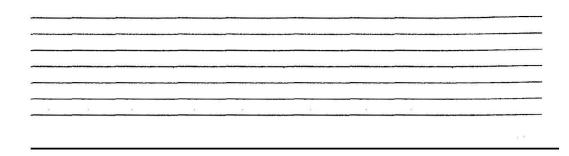


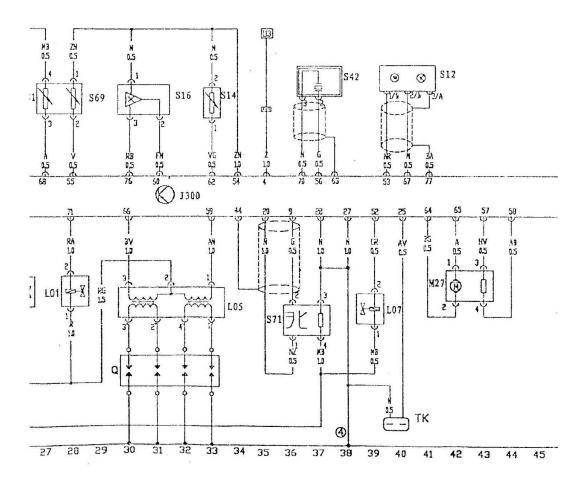
# MPI Electronic Injection (Marelli)

MPI 电喷系统 (Marelli)



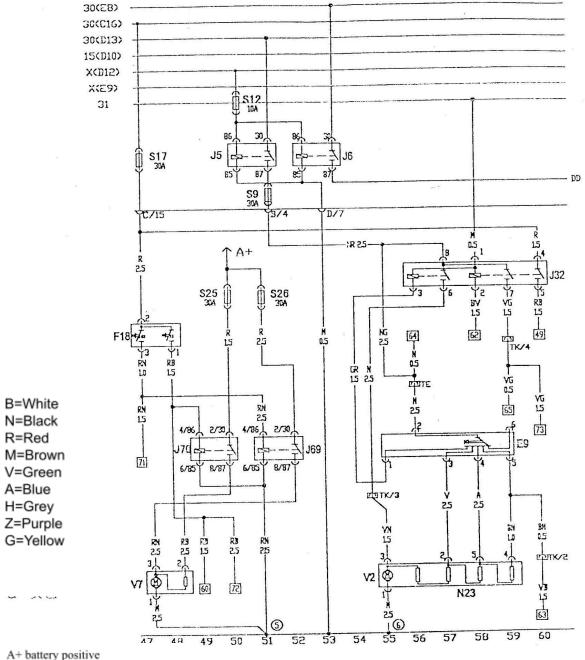
Note: ECU CONNECTOR 1-(1-52 PIN) ECU CONNECTOR 2-(53-80 PIN)





# A/C Unit, Control Head, Cooling System

# 空调器、操作机构、冷却系统



E9 blower switch F18 thermo switch N23 blower in-line speed regulator resistance V2 blower

V7 fan motor

J32 A/C relay

J69 Cooling fan high speed relay

J70 Cooling fan low speed relay

J5 A/C blower relay (in electrical box)

J6 Rear Window preheat relay

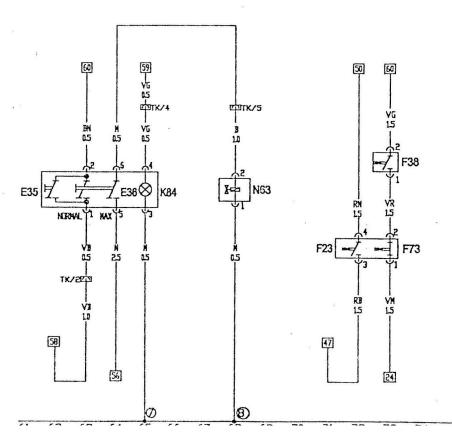
eq \o\ac(O,5) ground, in wiring harness in boot I

eq \o\ac(\infty,6) ground, on ground carrier beside central electrical box

# $\mbox{A/C}$ UNIT SWITCH, INTERIOR CIRCULATION SOLENOID, HIGH & LOW PRESSURE SWITCH

空调器开关、内循环电磁阀 高低压开关





eq \o\ac(O,7) eq \o\ac(O

TK 5 holes connector

B=White N=Black R=Red M=Brown V=Green A=Blue H=Grey Z=Purple

G=Yellow

E35 A/C unit switch

E36 Interior circulation switch

K84 A/C operating illumination switch

ground

N63 Interior circulation solenoid

F38 Outside temperature switch

F23 High pressure switch

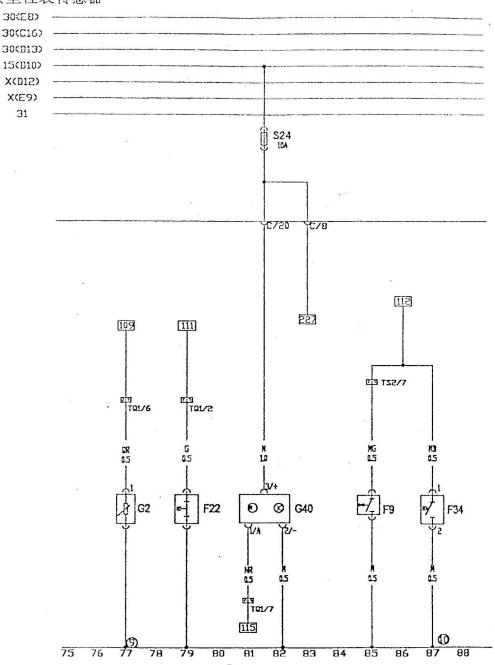
F73 Low pressure switch

# OIL PRESSURE SWITCH, COOLANT TEMPERATURE SENSOR, MANUAL BRAKE INDICATOR SWITCH, ODOMETER SENSOR

油压开关、冷却液温度传感器、手制动 指示灯开关、里程表传感器

30(E8)

X(D12) X(E9) 31



B=WHITE N=BLACK R=RED M=BROWN V=GREEN A=BLUE H=GREY Z=PURPLE G=YELLOW

G2 Coolant temperature sensor

eq \o\ac(\cappa,9) ground, on engine cylinder

F22 Oil pressure switch (low pressure) wiring harness

eq \o\ac(\infty,10) ground connection, in headlight

F9 Manual brake indicator switch

TQ1 10 holes connector

F34 Brake fluid level warning switch

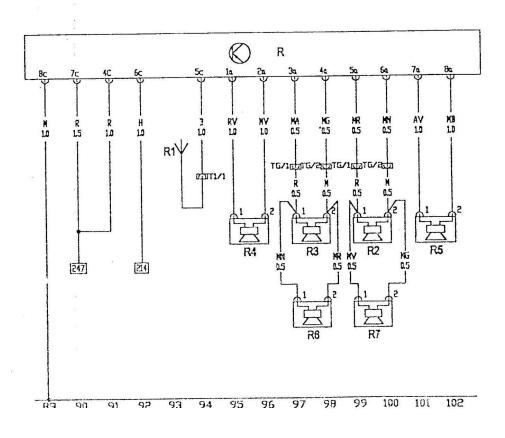
TS2 10 holes match connector

G40 odometer sensor

# **RADIO AND 6 SPEAKERS**

收音机及六扬声器





T8

8 holes

T1 single hole

B=WHITE N=BLACK R=RED M=BROWN V=GREEN A=BLUE H=GREY Z=PURPLE G=YELLO W

R radio

R2 front left speaker

connector

R3 front right speaker

connector

R4 right rear speaker

R5 left rear speaker

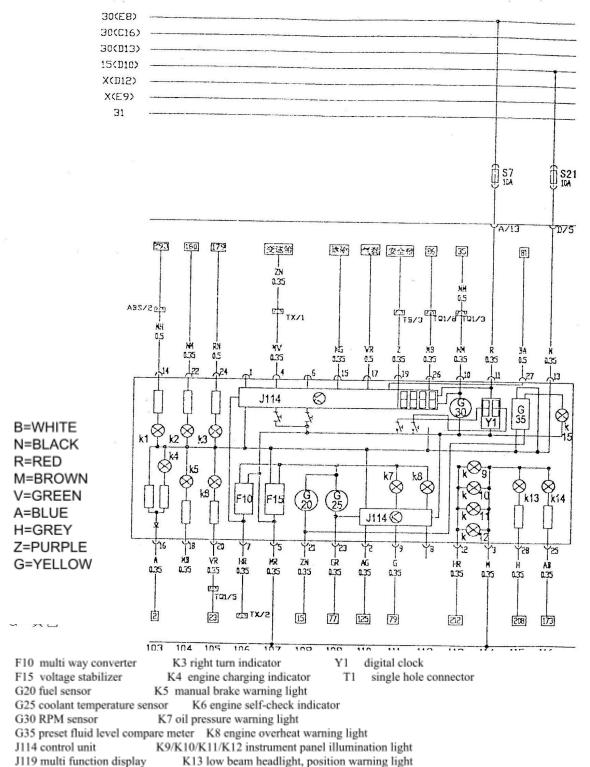
R6 left front speaker

R7 right front speaker

R1 antenna

### INSTRUMENT PANEL AND MFA

# 仪表板及 MFA



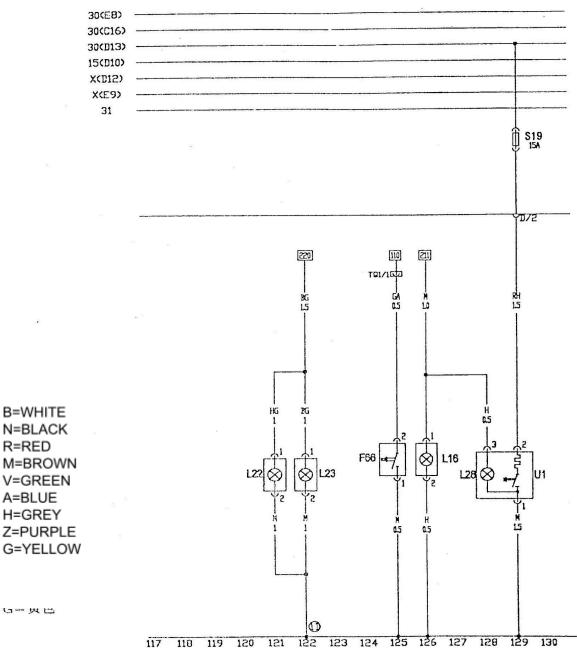
K15 fuel warning light

K14 high beam warning light

K1 ABS warning indicator

K2 left turn indicator

# 前雾灯、点烟器、空调面板指示灯



L16 A/C Control Panel Indicator

L22 Left Front Fog Light

eq \o\ac(\infty,11) Ground, In headlight wiring harness

L23 Right Front Fog Light

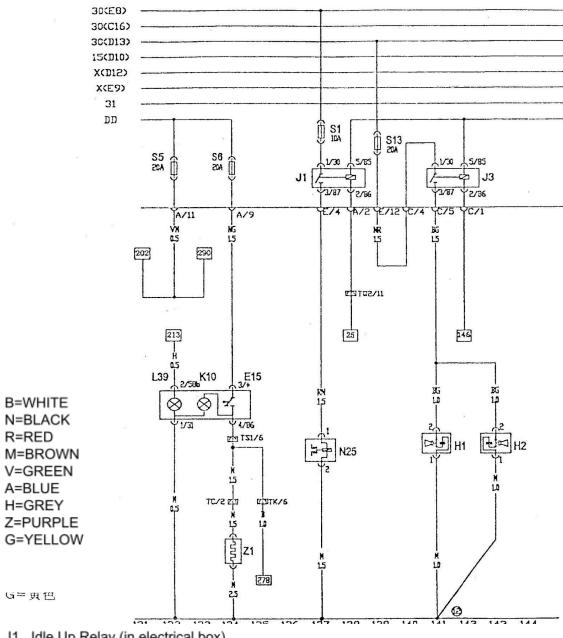
F66 Coolant Level Switch

L28 Cigar Lighter Illumination Light

U1 Cigar Lighter

# **MAGENETIC CLUTCH**

后风窗加热系统、双音喇叭 压缩机电磁离合器



- J1 Idle Up Relay (in electrical box)
- J3 Dual Pitch Horn
- J39 Rear Window Heating Switch Illumination Light
- K10 Rear Window Heating Indicator
- E15 Rear Window Heater Switch

H1(2) Dual Pitch Horn

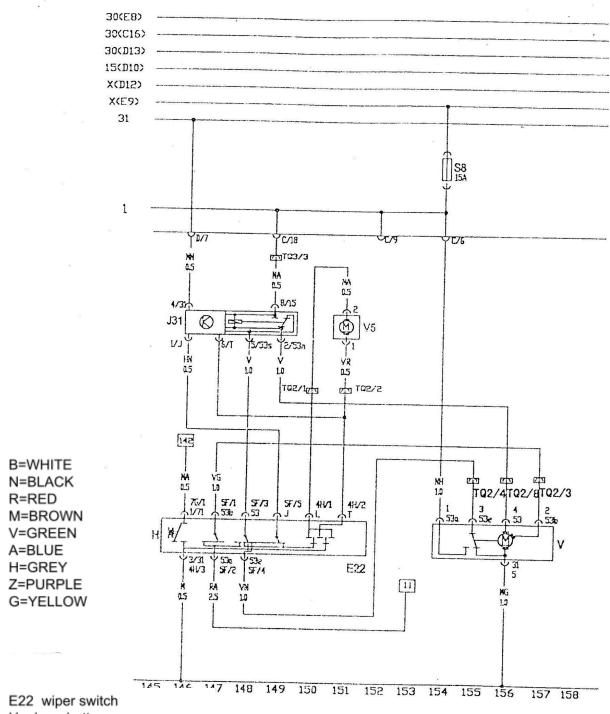
eq \o\ac(\infty,12) Ground point, in dual tone horn wiring

harness

Z1 Rear Window Heater

# WIPER, HORN BUTTON, WASHER

# 雨刮器、喇叭按钮、洗涤器



H horn button

J31 intermittent wiper relay

S5 fuse 15A

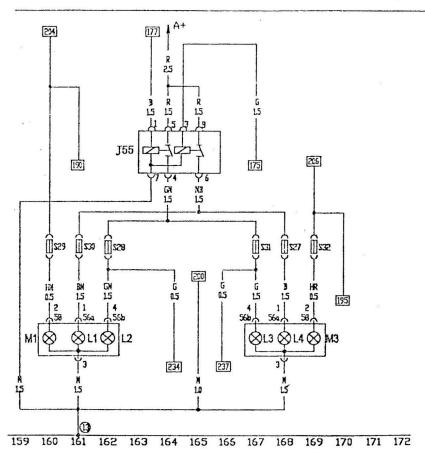
V wiper motor

V5 washer

# HEADLIGHT, FRONT POSITION LIGHT, LIGHT RELAY

前大灯、前位置灯、灯光继电器

30(E8)	····		
30(C16)		****	- 7
30(D13)			
15(D10)			
X(D12)			
X(E9)			
31			



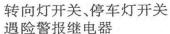
eq \o\ac(\O,13) Ground, In headlight

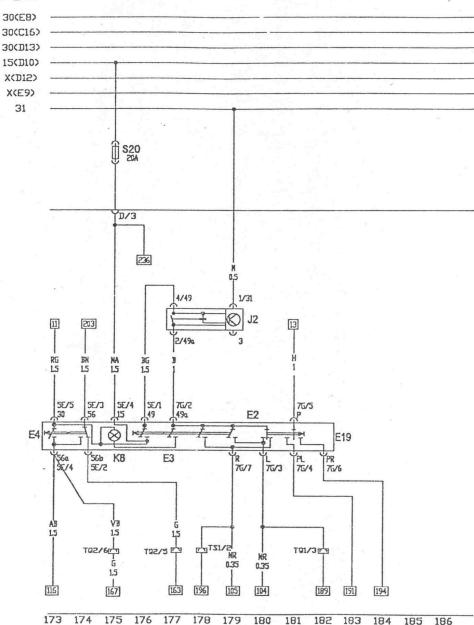
wiring harness

B=WHITE N=BLACK R=RED M=BROWN V=GREEN A=BLUE H=GREY Z=PURPLE G=YELLOW

- A+ Battery Positive
- L1 Left High Beam Headlight
- L2 Left Low Beam Headlight
- L3 Right Low Beam Headlight
- L4 Right High Beam Headlight
- M1 Left Position Light
- M3 Right Position Light
- 5 Light Relay
- 27 Right High Beam Headlight Fuse 10A
- 28 Left Low Beam Headlight Fuse 10A
- !9 Left Position Light Fuse 10A
- 10 Left High Beam Headlight Fuse 10A
- Right Low Beam Headlight Fuse
- )A
- 32 Right Position Light Fuse 10A

# TURN LIGHT, PARKING LIGHT SWITCH, EMERGENCY WARNING RELAY





- E2 Turn Light Switch
- E3 Emergency Warning Light Switch
- E4 Dimmer and Turn Light Switch
- E19 Parking Light Switch
- J2 Emergency Warning Light Relay
- K6 Emergency Warning Light
- S17 Fuse 10A

B=WHITE

N=BLACK

R=RED M=BROWN V=GREEN

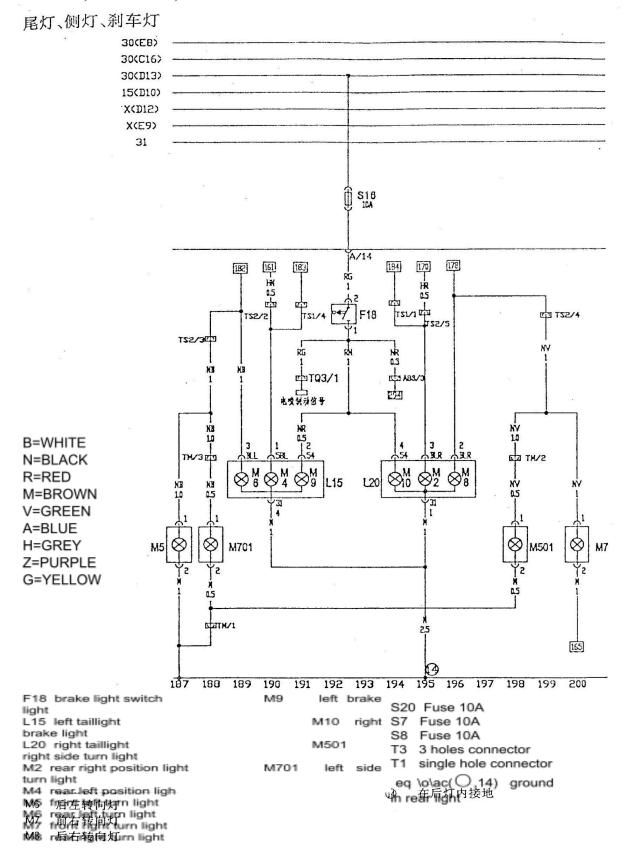
A=BLUE

H=GREY

Z=PURPLE

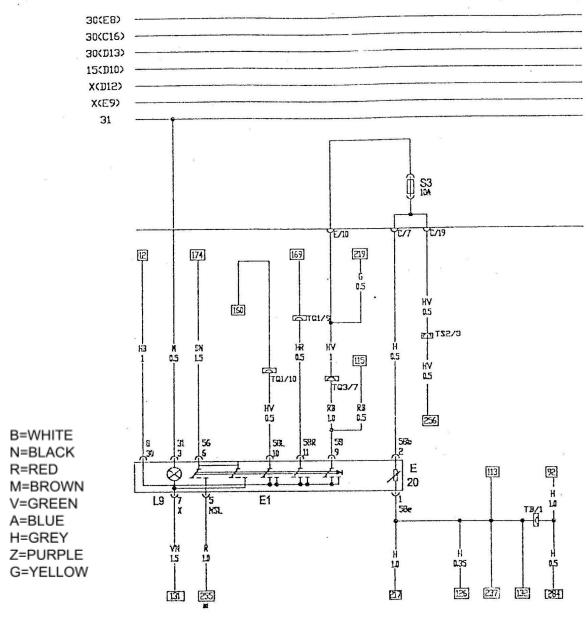
G=YELLOW

# TAILLIGHT, SIDELIGHT, BRAKELIGHT



# LIGHT SWITCH

# 灯开关



ロー界口

201 202 203 204 205 206 207 208 209 210 211 212 213 214

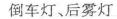
E1 Light Switch

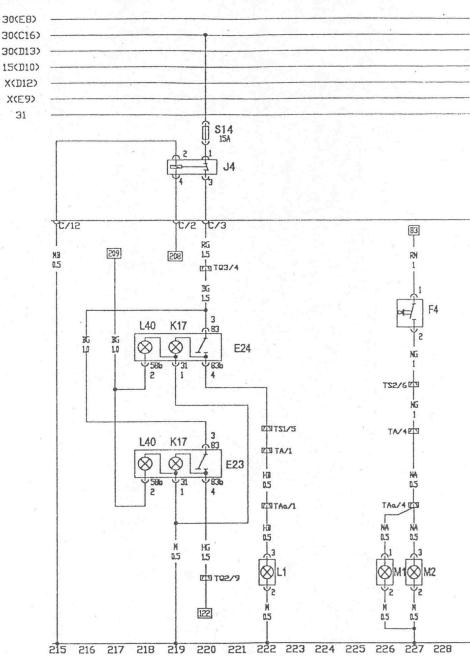
E20 Panel indicator / instruments illumination light variable resistance

L9 Panel indicator

S3 Fuse 10A

# BACKLIGHT, REAR FOG LIGHT





E23 Front Fog Lamp Switch

Taillight Moving Parts Wiring

F4 Back Light Switch

B=WHITE

N=BLACK

M=BROWN

V=GREEN A=BLUE H=GREY

Z=PURPLE

G=YELLOW

R=RED

Connector

J4 Fog Lamp Relay (in electrical box)

K17 Rear Fog Lamp Indicator

Connector

L1 Rear Fog Lamp

T1 Single Hole Connector

L40 Front & Rear Fog Lamp Switch Illumination Light

M1 Left Back Light

M2 Right Back Light

eq \o\ac(O,8) In Rear

T3 3 Holes

T3a 3 Holes Connector

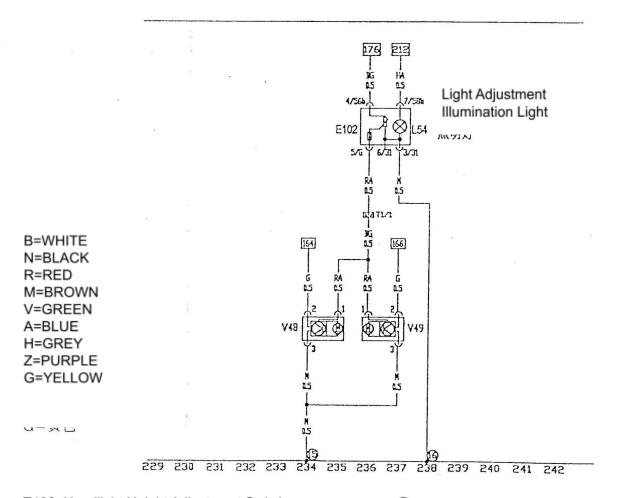
T2 2 Holes

T1a Single Hole Connector

# **HEADLIGHT ADJUSTMENT**

# 前大灯调节

30(E8)	
30(C16)	
30(013)	
15(D10)	
X(D12)	
X(E9)	
31	

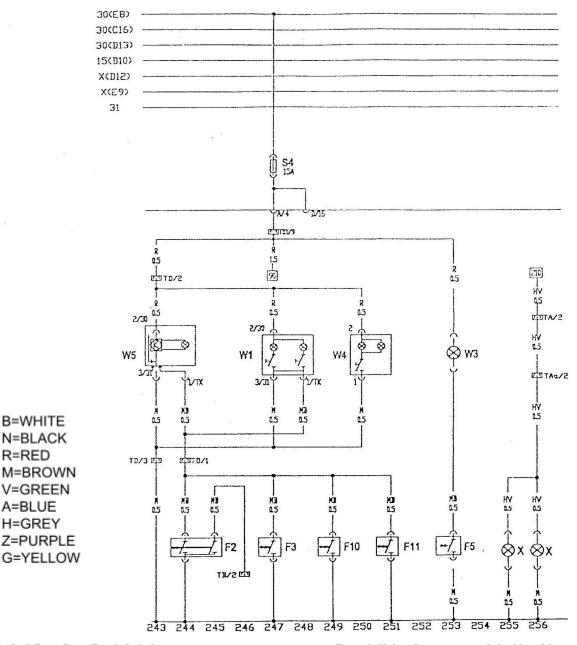


E102 Headlight Height Adjustment Switch L54 Light Adjustment Illumination Light V48 Left Front Headlight Adjustment Motor V49 Right Front Headlight Adjustment Motor

eq \o\ac(○,16) Ground, Located Beside Central Electrical Box eq \o\ac(○,15) Ground, at headlight T1 Single Hole Connector

# FRONT AND REAR INTERIOR LIGHT, LUGGAGE COMPARTMENT LIGHT, SUN VISOR LIGHT, LICENSE PLATE LAMP, DOOR TOUCH SWITCH

室内前后灯、行李箱灯、遮阳板灯、牌 照灯、门接触开关



F2 Left Front Door Touch Switch compartment

TAa 2 Holes Connector, on left side of luggage

F3 Right Front Door Touch Switch

W1 Rear Interior Ceiling Lamp

F5 Luggage Compartment Illumination Light Switch W3 Luggage Compartment Light

F10 Left Rear Door Touch Switch

W4 Sun Visor Light

F11 Right Rear Door Touch Switch

W5 Front Interior Ceiling Lamp With Delay Close

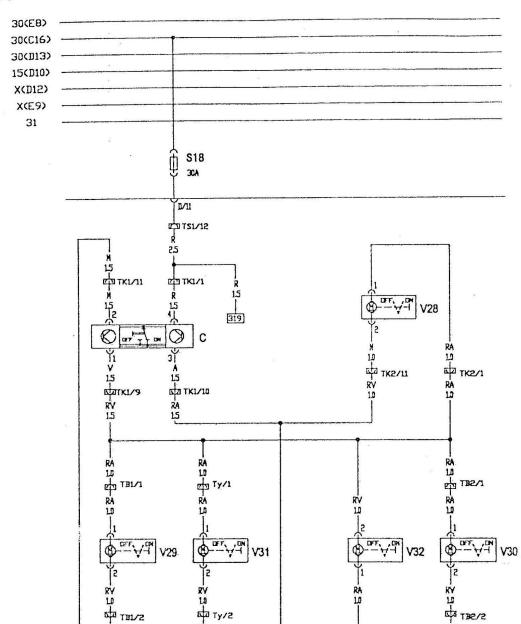
T8 2 Holes Connector

X License Plate Lamp

TD 4 Holes Connector

# CENTRAL LOCKING

中央门锁



N=BLACK R=RED M=BROWN V=GREEN A=BLUE H=GREY Z=PURPLE G=YELLOW

B=WHITE

Central Locking Control Unit (in left front door) TB1 4 Holes Connector (left B pillar side)

257 258 259 260

- V28 Right Front Door Lock Control Motor
- V29 Left Rear Door Lock Control Motor
- V30 Right Rear Door Lock Control Motor
- V31 Luggage Compartment Lock Control Motor
- V32 Fuel Tank Door Control Motor

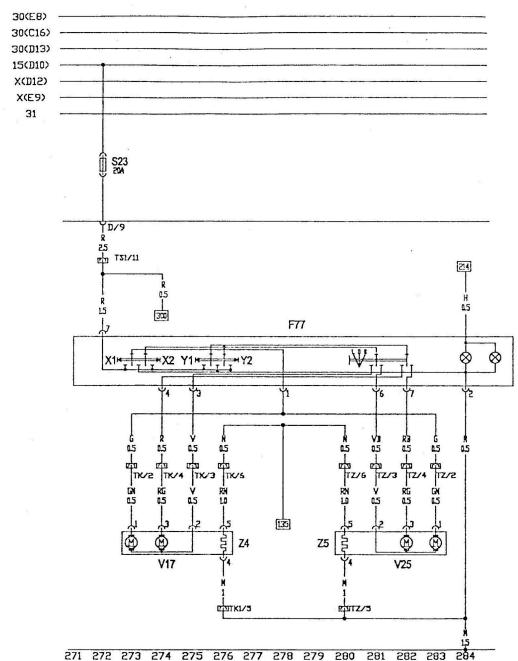
261 262 263 264 265 266 267 268 269 270

- TB2 4 Holes Connector (right B pillar side)
- TK1 12 Holes Connector (left A pillar Side)
- TK2 12 Holes Connector (right A pillar Side)
- 2 Holes Connector (Left C pillar side)

eg \o\ac(○,17) Ground Point Beside Central Electrical Box

# **POWER MIRROR**

# 电动后视镜



B=WHITE N=BLACK R=RED M=BROWN V=GREEN A=BLUE H=GREN Z=PURPLE G=YELLOW

F77 Mirror Switch X1 Left Adjust

X2 Right Adjust Y1 Up Adjust

Y2 Down Adjust

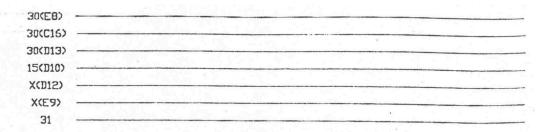
V17 Left Mirror Control Motor V25 Right Mirror Control Motor

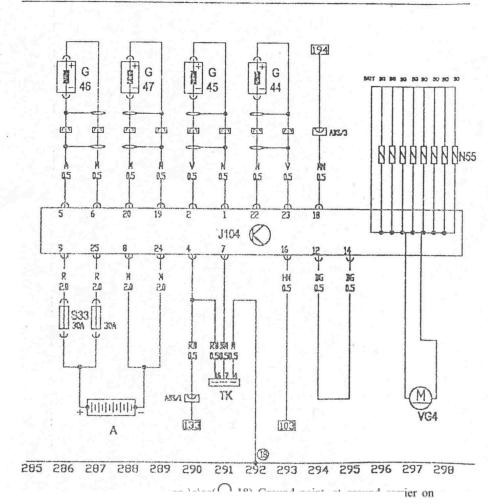
Z5

TK1 12 Holes Connector (left A pillar side ) Z4 Left Mirror Defogger Right Mirror Defogger

TK2 12 Holes Connector (right A pillar side) TZ 2 Holes Connector (beside central electrical box)

# **ABS**

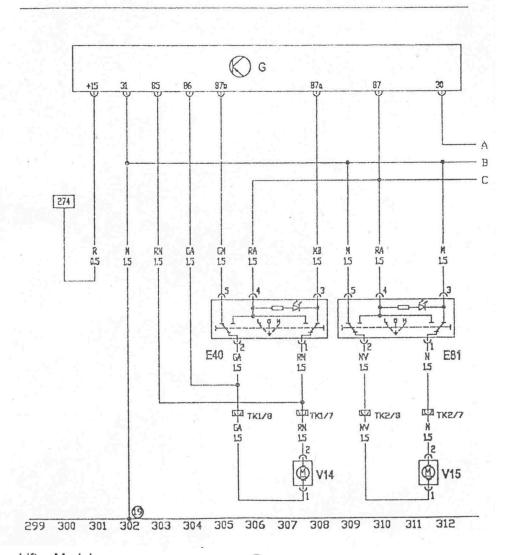




B=WHITE N=BLACK R=RED M=BROWN V=GREEN A=BLUE H=GREY Z=PURPLE G=YELLOW

# POWER GLASS LIFTER CONTROL UNIT

30(E8)		 	 .,	
30(C16)				
30(D13)		 ·	 	
15(D10)				
X(D12)				
X(E9)	-			
31	***************************************	 	 	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN



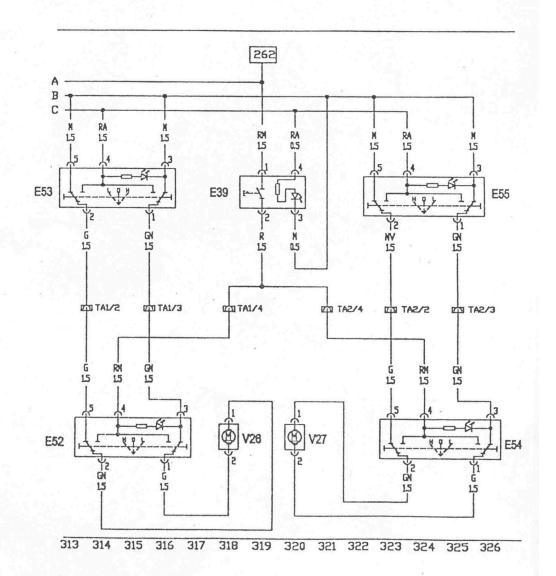
B=WHITE N=BLACK R=RED M=BROWN V=GREEN A=BLUE H=GREY Z=PURPLE G=YELLOW

G Window Glass Lifter Module E40 Left Front Window Lifter Switch E81 Right Front Window Lifter Switch

V14 Left Front Window Lifter Motor V15 Right Front Window Lifter Motor eq \o\ac(○,19) Beside Central Electrical Box TK1 12 Holes Connector (Left B Pillar Side) TK2 12 Holes Connector (Right B Pillar Side)

# POWER GLASS LIFTER CONTROL SWITCH

O(E8) —		
0(C16)		
O(D13) —		 
5(D10) —		
(D12) —		
(E9) —		
31		



E39 后部车窗升降器锁定开关

E52 左后门上车窗升降器开关

E54 右后门上车窗升降器开关

E53 左后车窗升降器开关

E55 右后车窗升降器开关

V26 左后车窗升降器电机

V27 右后车窗升降器电机

TA1 四孔插接件(左B柱侧)

TA2 四孔插接件(右B柱侧)